

FOOD AND
NUTRITION
TECHNICAL
ASSISTANCE

**A Review of the Advances and
Challenges in Nutrition in Conflicts and
Crises over the Last 20 Years**

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2003



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TABLE OF CONTENTS

<u>1. INTRODUCTION</u>	1
<u>2. BACKGROUND</u>	2
<u>3. ANALYSIS AND ASSESSMENTS</u>	6
<u>3.1. Advances</u>	6
<u>3.2. Challenges</u>	8
<u>3.3. Recommendations</u>	9
<u>4. INTERVENTIONS</u>	10
<u>4.1. Food Aid</u>	13
<u>4.1.1. Advances</u>	13
<u>4.1.2. Challenges</u>	15
<u>4.1.3. Recommendations</u>	18
<u>4.2. Livelihood Support</u>	19
<u>4.2.1. Advances</u>	19
<u>4.2.2. Challenges</u>	19
<u>4.2.3. Recommendations</u>	20
<u>4.3. Selective Feeding Programmes</u>	20
<u>4.3.1. Advances</u>	20
<u>4.3.2. Challenges</u>	21
<u>4.3.3. Recommendations</u>	22
<u>5. MONITORING AND EVALUATION</u>	24
<u>5.1. Advances</u>	24
<u>5.2. Challenges</u>	26
<u>5.3. Recommendations</u>	27
<u>6. CONCLUSIONS AND RECOMMENDATIONS</u>	29
 ANNEX 1: Workshops and Conferences Organized on the Subject of Nutrition in Emergencies.....	31
ANNEX 2: Bibliography.....	32

1. INTRODUCTION

Today, Afghanistan is on our news screens, tomorrow it will be another people afflicted with hunger and disease. The last twenty years has seen extreme human suffering in countries affected by conflict and crises. An experienced nutritionist can list the notable cases, for example: Ethiopia in 1984, Angola and Somalia in 1992, The Great Lakes in 1996 and southern Sudan in 1998. The HIV/AIDs pandemic has also created a new and chronic emergency. Emergencies are more frequently complex and more frequently characterised by conflict within nation states. These tend to be the most severe in terms of mortality and malnutrition.

Over the last decade the media has played an increasingly important role shaping the nature of the humanitarian response. High profile emergencies that have involved political, diplomatic and military engagement have been the focus of resources (IASC, 2000). However, it is important to note that much of our work, as public nutritionists, focuses on the less visible emergencies where challenges are often much greater in terms of the populations affected and the complexity of response.

The international community is being faced with new injustices, and new challenges to ensure the human right for adequate food and nutrition. This paper is intended to remind us of where we have come from in emergency nutrition and to highlight how far we have to go before the rights of disaster-affected communities are respected and upheld in today's world.

The main purpose of this paper is to assess the principle advances made over the past years in nutrition in conflicts and crises and to propose direction for further advances in the field. The term 'advances' refers to developments in technical knowledge and nutrition policy and practice. The Project Cycle Management is used as a framework for presenting these advances and the challenges that remain. Specifically, the paper

Considers the objectives of the advances and describes how well they have been achieved;
Determines the challenges and issues which still exist in relation to the advances; and
Provides recommendations on how these challenges might be overcome and issues resolved.

Advances made over the last 20 years are considered with historical reference. However, this paper is not intended to be an exhaustive listing of all achievements and challenges. The paper builds on the advances documented in the ACC/SCN 4th report (UNACC/SCN (2000) and, therefore, emphasises more recent developments as these are the issues into which current investment is being made. Each section ends with a series of recommendations for future action. It is hoped that this will contribute to the development of a plan of action for the international community that will accelerate the pace of advances in the field of emergency nutrition: advances that will lead to significant improvements in relieving the suffering, death and degradation of disaster-affected communities. The first step in this process would be a plan of action developed through the collaboration of bilateral agencies, UN Agencies, and NGOs through the UN ACC/Sub-Committee on Nutrition.

2. BACKGROUND

This paper is not able to provide significant detail on *how* the advances described took place, but it is essential to emphasise the important role that interagency collaboration has played in furthering the sharing of technical knowledge and improving the policies and practice of nutrition in conflicts and crises.

Table 1: Interagency Collaboration

ADVANCES MADE	OBJECTIVES OF ADVANCES
Information Sharing and Interagency Learning	
1993 ACC/SCN RNIS Refugee Nutrition Information System	To provide information and analysis on the nutritional status of refugee and displaced populations to key decision makers.
1990s: ACC/SCN Working Group on Nutrition in Emergencies linking to Interagency Group (see below)	To share information; assist in the harmonising and alignment of agency actions & identify critical issues for SCN participating bodies
Mid 1980s: Memoranda of Understanding (MoUs) and Letters of Agreement between UN organisations, intergovernmental and non-governmental organisations and national entities. mid 1980s – mid 1990s: MoU between UNHCR and WFP developed and revised	To facilitate co-operative action and to ensure accountability vis a vis respective responsibilities to beneficiary populations.
Mid – Late 1990s: The Interagency Group meetings: Impacts of this include: shift of emphasis to public nutrition standardisation of procedures and protocols	<ul style="list-style-type: none"> - To share experiences and knowledge, and to move away from the concept of owning knowledge - Opportunities to contribute to the improvements in standardisation of procedures and protocols
1996: Emergency Nutrition Network (ENN) set up Field Exchange (primary output of ENN)	<p>To provide a networking mechanism for those working in the humanitarian food and nutrition sector.</p> <p>To provide a medium for the exchange of programme experiences in order to ensure that such experiences are not lost; help strengthen agency institutional memory of experiences and lessons learnt; help keep field staff up to date with current research and evaluation findings; sensitise academics/researchers to issues and problems faced by staff implementing programmes so to ensure research agendas are more applied to practical needs.</p>

1997: NGONUT	To allow a prompt forum for sharing experiences and questions amongst a global group of nutritionists.
1996: Infant Feeding Interagency Groups developed and reformed	<ul style="list-style-type: none"> - To formulate a coherent, appropriate and widely acceptable policy and strategy statement for humanitarian agencies. - To address some of the problems and knowledge gaps around this subject - To identify practical tools to assist agencies in the implementation of policy.
Standards of Operation	
1998: The Sphere Project: Humanitarian Charter and Minimum Standards in Disaster Response (Sphere 2000).	<ul style="list-style-type: none"> - To provide a practical framework for accountability by connecting the principles of humanitarianism to standards of service delivery. - To provide an operational tool or reference to help structure the planning and management of emergency programmes

An increased need to improve collaboration has become particularly important over the last 20 years as a result of the increasing numbers of agencies (particularly NGOs) that work in the area of nutrition and food security in emergencies.

Table 1 describes the key developments in interagency collaboration and policy development. Prior to the initiation of interagency meetings and publications described in the table, information sharing was very limited. The nutrition sector today can however pride itself in the very significant advances in technical collaboration. The origins of some of the key developments and advances in the field of nutrition in emergencies can particularly be traced to the interagency meetings listed in Annex 1 (Young 1999). These meetings provided a forum for improved coordination, mutual understanding and enhanced analysis of the constraints within the humanitarian system. A central focus of the work of the interagency group was the move towards *Public Nutrition*¹ indicating a shift from the individual to the population level and from a narrow set of technical interventions to a wide range of strategies, policies and programmes to combat malnutrition (Harinarayan 1999). The interagency group has provided a catalyst for a number of initiatives that have enhanced policy formulation and practice guidelines.

The Interagency Group was instrumental in recommending the establishment of the Refugee Nutrition Information System (RNIS) of the UN Sub Committee on Nutrition (SCN) in 1993. The RNIS project was the first to systematically collect, compile and report on interagency nutrition and mortality data in response to the lack of information on the observed high rates of acute malnutrition and crude mortality in emergency affected refugee and displaced populations. The reports present recommendations and priorities for action, including key constraints to operational response and serve to act as an advocacy tool in raising awareness of the seriousness

¹ Public Nutrition is a broad-based problem-solving approach to addressing nutritional problems of populations or communities in which the broader factors of health, water and sanitation and social care play significant factors in the causes of malnutrition, alongside food insecurity. This approach requires a contextual analysis from the macro to the micro levels.

of particular contexts and often focus on emergency situations which are not covered by the media or have been “forgotten”.

A second example of interagency collaboration has been the development of the *Emergency Nutrition Network* (ENN) that has become the key forum for information sharing amongst nutritionists working in emergencies (see Annex 1). Its primary focus has been to ensure that experiences and lessons learnt are documented so that institutional learning can take place in the short to medium term. The ENN is in its fifth year and is now funded by approximately 20 agencies (UN, bilaterals and NGOs). It distributes the quarterly journal, *Field Exchange* to 2000 people. There is no question that *Field Exchange* has filled a niche and that demand and support for the publication is increasing.

A third example of the positive consequences of interagency policy development can be shown in the area of infant and young child feeding in emergencies. These advances have been initiated by various interagency groups and meetings where experiences have been discussed. Baby Milk Action, the UK component of the International Baby Food Action Network (IBFAN), initiated the process with UK agencies which resulted in the series of meetings held between September 1996 and December 1997. In Europe a similar process was undergone, led by WEMOS.

Following the publication of research and assessments conducted during the Kosovo crisis which showed serious deviations from best practice models including the widespread donation of infant feeding products including infant formula and feeding bottles, their indiscriminate distribution to affected population, further efforts were made to compile and disseminate as widely as possible and beyond traditional “nutrition networks” a consensus document which provided clear guidance on infant and young child feeding in emergencies. This document has been supported by more than 20 agencies including the major operational UN agencies. Its implementation has been supported by the development of training modules for staff who are not technically trained in health and nutrition and for those that are. These initiatives are testimony to the success of interagency networks and demonstrate their greater potential in realising far reaching change in policies and practice.

An unprecedented example of interagency collaboration was demonstrated in the preparation of the nutrition chapter for *The Sphere Project Humanitarian Charter and Minimum Standards in Disaster Response*². This project aims to improve the effectiveness of humanitarian action and to make humanitarian actors more accountable. The Sphere initiative has stimulated much debate, ranging from enthusiastic support to concern over the limitations it might place on humanitarian action. Beyond the limited number of official Sphere translations that exist, the Sphere project has been spontaneously translated into 19 languages. Sphere is also relevant to assessments, planning and implementing interventions as it helps determine objectives and indicators against which those objectives will later be evaluated.

Since the first trial edition of the handbook was produced in 1998, the Project has supported several activities aimed at improving understanding, and application, of the Charter, minimum

² The Minimum Standards specify the minimum acceptable levels to be attained in sectors of humanitarian response. Each standard has a set of key indicators which signal whether the standard has been attained. They provide a way of measuring and communicating both the impact, of the programmes as well as the process methods used.

standards and key indicators. For example, dissemination of brochures and the handbook, maintenance of an informative website, production of training materials that focus on the practical use of the standards in humanitarian work, facilitation of interagency workshops, creation of and support to a network of trainer/facilitators to promote discussion, debate and learning on the implications of the Project, and a pilot programme which involves 20 diverse agencies testing the implementation of the standards.

These interagency initiatives are becoming increasingly inclusive, aiming to consider operational as well as technical and academic agencies and endeavouring to ensure the participation of southern NGOs and agencies. However, interagency collaboration is one small part of the process of facilitating real advances. The development of technical guidelines is another and there has been much investment in these³. Capacity building, not discussed in detail here, is the growing area for consideration and investment. For real progress to be achievable and sustainable, global, national and local capacity for sound nutritional analysis and response remains perhaps the biggest challenge for the coming years. This fact becomes apparent throughout the subsequent sections of this paper as the limitations of advances achieved are described.

³ Examples include WHO (1999) *Management of Severe Malnutrition: A Manual for Physicians and other Senior Health Workers*. World Health Organisation: Geneva; WHO/UNCHR/IFRC/WFP (2000) *The Management of Nutrition in Major Emergencies* World Health Organisation: Geneva; WFP (2000) *Food and Nutrition Handbook*. World Food Programme, Rome; UNHCR *Emergency Guidelines* United Nations High Commission of Refugees. Geneva; UNICEF (2001) *Technical Notes: Special Considerations for Programme Division (PD) and the Office of Emergency Programmes (EMOPS)*. Ismail S, Manandhar M (1999) *Better Nutrition for Older People: Assessment and Action* HelpAge International, London School of Hygiene and Tropical Medicine; MSF (1995) *Nutrition Guidelines* Medecins Sans Frontier; Prudhon C. (2001) *La Malnutrition en situation de crise*. Action Contre la Faim; Seaman J. , Clarke P., Boudreau T., Holt J. , (2000) *Household Economy Approach*. Save The Children – UK 2000

3. ANALYSIS AND ASSESSMENTS

Table 2: Analysis and Assessment

ADVANCES MADE	OBJECTIVES OF ADVANCES
<p>1980s: Use and application of conceptual framework of causes of malnutrition.</p> <p>The emphasis placed by Amartyr Sen's work (Sen 1981) on accessibility of food as well as availability transformed analytical thinking.</p> <p>Mid 1980s: growth and development of early warning systems sometimes alongside nutritional surveillance: FEWS (Famine Early Warning Systems), FIVIMS (Food Information Vulnerability Mapping Systems).</p> <p>1990s: Many local Early Warning Systems are established which monitor market prices, coping strategies etc.</p> <p>1999: FEWSNET launched to take FEWS beyond food availability to considering food access.</p> <p>Longitudinal nutritional surveillance, at first thought to hold many of the answers to famine mitigation became, during the 1990s, less supported. Now, periodic surveys are increasingly used to monitor emergency prone communities.</p> <p>Mid 1990s: Anthropometry: an increasingly widespread use; use of standard indices including z-scores; increased research (although still very limited) into the role of anthropometry in adolescents, adults and the elderly.</p> <p>Early 1990s: Food Security and Livelihoods Analyses: Improved methodologies, analyses & coordination. Save the Children: Household Economy Approach WFP: Vulnerability Assessment and Mapping Oxfam & Care: Livelihoods Assessment</p>	<p>To improve the effectiveness of programmes aimed at preventing malnutrition</p> <p>To provide macro level data on food availability to identify countries facing acute food insecurity</p> <p>To identify a deterioration in nutritional status, contribute to emergency preparedness and provoke a response.</p> <p>To ensure greater standardisation of use of indices and cut-offs.</p> <p>To provide an influential factor for resource allocation.</p> <p>To improve analytical base for programming and move from an understanding of food availability to food access.</p>

3.1. Advances

As the paradigm of public nutrition began to be established in the early 1990s, UNICEF developed a conceptual framework for understanding the causes of malnutrition. This was incorporated into their policy, as part of their Triple A approach. This framework was largely based on the Tanzania (Iringa) Nutrition Programme (UNICEF 1990). The framework was later adopted by a wider group at the International Conference on nutrition in 1992 (Shoham 1999). This framework has been instrumental in ensuring an understanding of malnutrition that goes beyond inadequate intake to include the range of food security, care and health factors that

contribute to malnutrition. Analysing these processes in specific contexts has created opportunity for intelligent nutrition programmes which address real rather than assumed causes.

Assessment of malnutrition and mortality, which are located at the apex of the conceptual framework, has become increasingly widespread in emergency-affected communities, so much so that the prevalence of acute malnutrition (wasting and oedema) of children 6-59 months is now a widely used currency for understanding the extent of the impact of a crisis on populations. This demonstrates the usefulness of anthropometry in providing objective data in situations where information may be limited and also indicates the importance given to levels of malnutrition for understanding the likely impacts on mortality (ACC/SCN 1994). Standard survey methods are now largely agreed upon in key emergency nutrition guidelines⁴ and combined with freely available software for statistical analysis, such as Epi-Info, have facilitated comparison of affected populations both spatially and temporarily.

While the usefulness of anthropometry is not in dispute, knowing a level of malnutrition alone does not allow a humanitarian agency or government to respond appropriately unless an understanding of the causes of malnutrition is sought. Causal analyses (using the conceptual framework) are frequently conducted alongside anthropometric assessments (for example Chastre, LeJeune 2001). These allow the bringing together of quantitative and qualitative approaches to their best advantage. These are exciting developments which must be invested in further to establish best practice approaches.

There is also increased understanding of the importance of the analysis of epidemiological data alongside that of anthropometric data. Measles coverage data has become a fundamental component of regular data collection within anthropometric surveys and the importance of assessing mortality indicators in conjunction with malnutrition has become more widely recognised. In Burundi in 2001, standardised reporting of the numbers of malnutrition cases in centres and the number of malaria cases, combined with analysis of the worsening food security situation proved to make a strong case for assistance (Goldman *pers comm*).

While the assessment of malnutrition in children under five years and the estimation of prevalence has become routine work for many emergency nutritionists, there remain substantial gaps in understanding how to measure acute malnutrition in other age groups, namely infants (<6 months), adolescents, adults and the elderly. This is due to the inadequacies of reference population data and inter-ethnic variation. In the last few years the limits of our understanding of how to measure these groups have become more widely discussed and the research agenda has become clearer. Much of this discussion has resided within the SCN through the publication of the RNIS supplements (ACCSCN 2000a), the Working Group on Emergencies special meeting 2001 and the ENN Field Exchange Issue 9.

Progress in assessment of malnutrition has been paralleled by the more widespread establishment of early warning systems in emergency prone countries. Some of these are based on analysis of food supply (e.g. Famine Early Warning Systems and more recently FIVIMs) while others use an

⁴ Examples include *The Management of Nutrition in Major Emergencies* World Health Organisation: Geneva; WFP (2000) *Food and Nutrition Handbook*. World Food Programme, Rome; MSF (1995) *Nutrition Guidelines* Medecins Sans Frontier; Prudhon C. (2001) *La Malnutrition en situation de crise*. Action Contre la Faim

understanding of access to food. The Vulnerability Assessment Mapping which is one of the most important emergency management tools used by WFP is used to improve understanding of food security issues and to identify the most appropriate strategy for addressing food insecurity. VAM compiles secondary data taking into account such factors as seasonal difference, hunger at community level and at the household level. It is used by decision-makers in headquarters and in the field. WFP has also designed a Standardised Analytical Framework which incorporates best practices in secondary data analysis, participatory assessment, the use of geographic information systems and other analytical tools.

Progress made in the assessment of household food and livelihood security has been extensive both in terms of the development of sound methodologies and in their widespread use across large parts of emergency-affected countries. These methods have moved beyond analysing food balance sheets, mapping environmental conditions and monitoring agricultural production and vegetation to understanding households' access to food. The development of the Household Economy Approach (HEA) for assessing food aid needs by Save the Children UK was a significant part of this process. This approach sought to understand the effects of entitlement theory on different socio-economic groups in different communities (Seaman *et al* 2000). This analysis is conducted for baseline years and for periods following a shock. The information provided is sufficient to calculate food aid needs, suggest who should receive assistance and outline alternative livelihood support strategies to minimise the short and long term impact of the crisis on affected communities. HEA has been followed by the development of other approaches to assessing livelihoods which all hinge on understanding access to, rather than simply availability of, resources with a concern for longer term support of livelihoods and self sufficiency as well as immediate needs (Oxfam 2001).

3.2. Challenges

Despite consensus on appropriate anthropometric survey methodologies, there remain frequent examples of poorly conducted surveys or assessments which serve to misinform rather than inform decision making (for a review see Collins 2001). Common mistakes include fundamental errors on sample selection, unclear and untransparent presentation of data and failure to include assessment of oedema. These errors reflect poor human resource capacity and the failure of those agencies responsible to take technical expertise in nutrition seriously (see Background section).

The importance of clear case definitions for micronutrient deficiencies, adequate sample size, and, where possible, biochemical confirmation during micronutrient deficiency assessments has been widely recognised. However, challenges in their implementation and the lack of validated field-friendly sample collection and analysis technology remain.

While a causal analysis and an anthropometric and, where possible, mortality survey are now regarded as a prerequisite for designing a programme to address malnutrition in emergencies, donor support for assessment which is not tied to predesigned programme implementation in nutrition is hard to find. On occasions when agencies do not have the means to fund assessments, unjustifiable and inappropriate interventions may result. Good assessment and

analysis leads to identification of the food, health or care elements causing the malnutrition crisis. Nutrition needs to be central but seen in the context of public health as well as livelihoods.

There remain substantial shortfalls in the adequacy of response to early warning information (see Box 3 and see section 4.1.1) and so early warning systems have not been as useful in preventing emergencies as had been hoped. While the increased use of anthropometric figures in planning emergency response can be regarded as progress, levels of malnutrition usually become affected late in a crisis and yet are increasingly being used to trigger decisions. This throws into question the ethics of comprehensive food information systems which monitor early indicators of a food crisis.

Box 3: Save the Children UK with funding from the European Union assists the government of Sudan and regional structures in North Darfur to operate a comprehensive food information system for monitoring the effects of drought, conflict and other shocks on households' capacity to cope. This system provides timely food security and anthropometric information for decision makers to respond appropriately to save lives and livelihoods. In October 2000 the Food Information System described an impending crisis resulting from a food deficit which amounted to approximately 26,000MT grain. By April 2001 levels of acute malnutrition had reached 30% in some parts of the state and the terms of trade had deteriorated sharply. Adequate resource allocations were not made until the situation had become life threatening risking widespread sale of assets and destitution and elevated mortality associated with malnutrition and displacement (Save the Children 2001).

3.3. Recommendations

1. Agencies delivering food aid or implementing feeding programmes commit to developing sound technical capacity in nutritional assessment. Guidelines for assessments should be easily accessible to and used by those agencies which do not have their own. Interagency assessments should be encouraged.
2. The links between early warning information and response are analysed and documented and used to inform wider debate on the future of EWS. Implementing agencies and donors should discuss this commitment before the start of a programme.
3. Donors should evaluate their funding requirements with a view to allowing operational agencies the flexibility to conduct assessments without predetermined decisions on response.
4. Investment is made into research in emergencies on the appropriate anthropometric measures and cut offs for assessing acute malnutrition for infants, adolescents, adults and the elderly. Findings should be reported back for the ACC/SCN Nutrition in Emergencies Working Group meeting in 2003.

4. INTERVENTIONS

Table 3: Interventions

ADVANCES MADE	OBJECTIVES OF ADVANCES
Food Aid ration quantity	
<p>Late 1980s: Agreement among major relief agencies to increase daily food ration from 1500 to 1900 kcals/pp/pd.</p> <p>Mid – late 1990s: Internationally agreed guidelines and policies, developed by WFP and UNHCR with inputs from WHO and others have ensured the improvements of rations (WFP/UNHCR 1997). The improvements include:</p> <ul style="list-style-type: none"> - Minimum energy content of food ration for populations entirely dependent on external food aid was increased to 2100 kcals/pp/pd - Guidelines have been developed for adjusting the calorific content of the ration according to the context (factors include environmental temperature, gender and age composition of the affected population, their physical activity levels and access to other food sources). 	<p>Reduction in acute malnutrition and crude mortality, particularly amongst children under 5 years.</p> <ul style="list-style-type: none"> - Standardisation of protocols and methodologies. - Improvements in the professionalism of work. - Reduction in mortality from acute malnutrition
Food aid ration quality	
<p>1990s: Improvement of the nutritional content of the ration. Focus on addressing micronutrient deficiencies. Fortification of commodities (oil and salt) and inclusion of blended food in the general ration for population entirely dependent on food aid.</p> <p>1997: Recommended levels of fat and protein as a percentage of the total energy have been established (17% and 12% respectively) (WFP/UNHCR 1997) WFP building local capacity to produce fortified blended food through support to fortification at the local level and milling initiatives.</p> <p>2000: Regulations within the US Department of Agriculture.</p> <p>2000: Safe levels of intake for micronutrients established (WHO, 2000).</p>	<p>Reduction of micronutrient deficiencies amongst food aid dependent populations. To improve micronutrient content of general food rations.</p> <p>To improve macronutrient content of general food rations.</p> <ul style="list-style-type: none"> - To prevent the shipment of any cereal based fortified food that does not satisfy minimum standards for the nutrients Vitamin A and iron. - To ensure that the entire micronutrient fortification profile of up to 14 vitamins and minerals are above specified minimums.

Food Aid Delivery and distribution	
1997: UNHCR food distribution guidelines (UNHCR 1997)– the first guidelines to assist in designing appropriate distribution systems.	To improve efficacy and standardisation of distributions.
Mid 1990s: WFP made policy commitments to giving women direct access to and control over food aid by targeting women directly and encouraging them to participate in designing, implementing, managing and monitoring food distributions (WFP 1998)	Ensuring that women control a family's food entitlement is seen as the best way to ensure that food aid reaches and is consumed by family members, including women and children.
Improved tools for geographic /community/ household based targeting developed and applied, including through the development of such household food economy methods by SC/UK, VAM by WFP and other methods.	Improved targeting of food aid. To improve the process towards self reliance in long term refugee situations
2000: Review of principles and practice of food distribution in conflict (Jaspars 2000a) .	To assist humanitarian agencies in developing a principled approach to food distribution
Livelihood support	
Alternative interventions to address food crises have become more widely documented including: Food interventions: food for work and food vouchers; income support: cash grants, cash for work, cash vouchers and microfinance; market support; and livelihood support: both agricultural and livestock	To save livelihoods as well as lives To maintain dignity amongst the affected populations To improve the long term impact of programmes To ensure relevance of programme to context
Selective Feeding Programmes	
Early 1980s: guidelines on standard treatment protocols, entry and exit criteria for selective feeding programmes and methods of measuring malnutrition in populations were developed.	
Early 1980s: Oxfam feeding kits and manuals were developed.	

Supplementary feeding Guidelines:

- 1977: Oxfam provided the first set of guidelines (Lusty & Diskett 1977)
- Early 1980s: Somali Ministry of Health's Refugee Health Unit in collaboration with UNHCR and NGOs
- 1994 ACF Nutrition Scientific Committee developed recommendations concerning the composition of the different flours used in the nutritional rehabilitation of moderately malnourished children
- several NGO guidelines (MSF 1995) (Prudhon ACF 2001)

Therapeutic feeding:

Mid 1990s: Specifically adapted products for treating severe acute malnutrition were introduced:

F-100 high-energy therapeutic milk, based on the type I and type II nutrition concept (Golden 1995)

ReSoMal: oral rehydration salt

F-75 milk used during the first days of treatment when the child's status is particularly critical and under evaluation.

Ready to Use Therapeutic Foods (RUTF) developed.

1997: Prudhon Index: (Index to assess the risk of mortality for children treated for severe malnutrition, taking initial anthropometric status and the presence or absence of oedema into account) (Prudhon *et al* 1997).

1999: Guidelines developed and disseminated by WHO (WHO 1999) These have been further supported through NGO guidelines describing systems for their application (Prudhon,ACF 2001).

Increased attention given to the care aspects of severely malnourished cases, e.g. activities to motivate children to take food and medicines; to ensure that siblings stay together (UNICEF 1997 and WHO 1999)

Standard guidelines on assessment and treatment of acute malnutrition to ensure sustainability of a programme by the host country and refugees themselves.

Standardisation of programme implementation. Distinction of blanket feeding programmes (e.g. all children under 5 years) and targeting feeding programmes (e.g. targeted according to nutritional status).

To improve the proportion of lipids and proteins and the vitamin and mineral content.

To help make the weight increases of severely malnourished children comparable to those of children being treated in specialised research units.

To readjust the electrolyte balance of the severely malnourished case before gain of weight (hence reducing risk of mortality).

To prevent the risk of heart attack in particularly fragile and severely malnourished children

To provide therapeutic foods that can be taken home with limited risk of bacterial contamination.

To support decision making on the appropriate approaches for the treatment of severe malnutrition (eg re: type of feeding centre).

Standardisation of protocols in order to save lives.

To improve the mental welfare of severely malnourished cases in order to have a more effective recovery.

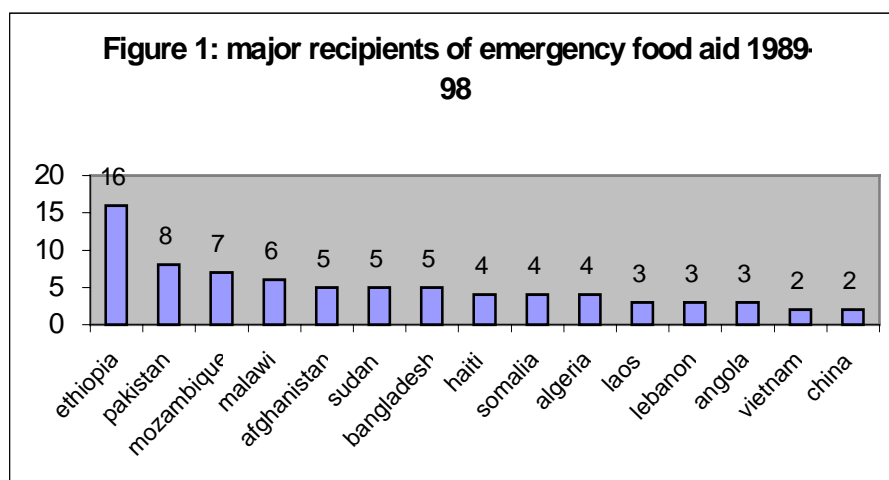
4.1. Food Aid

4.1.1. Advances

Food Aid Resourcing

Since 1989, the proportion of global food aid allocated to emergencies⁵ has increased from one eighth to one third in 1999 when it equalled 4.7 million MT (IASC 2000). The remaining two thirds are allocated to project⁶ and programme food aid⁷. In 2000, 86% of WFP food aid went to emergency activities, the highest proportion for 23 years. The increasing proportion of food aid allocated for emergencies should be seen in the context of greatly fluctuating total food aid allocations over the 1990s. While the proportion of food aid allocated to emergencies has increased, the overall quantity has varied substantially through the decade, peaking in 1992, declining substantially in the mid 1990s to 2.8 million MT in 1996 and increasing again in 1998 (IASC 2000). The latter increase is unlikely to be sustained and is attributable, as are previous food aid trends, to the appearance of global surpluses and the subsequent increase in programme food aid for Russia (IASC 2000). These recent surpluses (primarily from the US) have also provided impetus for initiatives like WFP's global school feeding programme launched in 1998.

Figure 1 shows the largest recipients of food aid 1989-1998 who in total received about three quarters of emergency food aid donated in that period. All except three (Malawi, Vietnam and Laos) of the 15 countries in the graph experienced a degree of conflict in the time period shown (Barry & Jeffreys 2002).



There have been enormous advances at donor level (bilateral and multi-lateral) with regard to provision of food aid and other resources for food and nutritional emergencies. Many of these advances have been in response to the political, institutional and bureaucratic constraints which affect donors in extremely specific ways. For reasons of brevity only a few examples can be

⁵ Emergency or relief food aid is targeted and freely distributed to natural and man-made disasters.

⁶ Project food aid is provided on a grant basis to targeted groups to support specific developmental activities

⁷ Programme food aid is provided bilaterally for sale in developing countries, the funds being used either as general budgetary support or to finance specific development projects

given here. In the 1990s DANIDA (Danish Government) radically increased the cost-efficiency of its food aid programme by spending resources on calorie dense foods rather than expensive protein rich foods which had been a mainstay of its food aid programme up until then. In 1996 the EC implemented Regulation 296 which among other initiatives established a cash facility for supporting food security measures. This allowed for a significant move away from providing food aid. In 1996 the US Congress replaced the wheat reserve by a Food Security Commodity Reserve of wheat, corn, sorghum and rice to be used to meet unanticipated emergency needs in developing countries. The Department for International Development (UK) have moved away from provision of food aid except for the acute phase of emergencies. DfID prefer to provide cash and other resources to support food security and are currently piloting a number of cash type initiatives in emergency contexts. In addition, WFP have worked to improve the efficiency of their food aid resourcing and programming. Examples of notable initiatives have been the regionalisation of EMOPs, (Emergency Operations), establishment of the Immediate Response Account and the improved monitoring of pipeline through establishing the FASReports.

In addition to the advances in resourcing food aid, there has been some evidence of commitment towards improving practice in food distribution in conflict situations. A recent WFP workshop on food aid in conflict (WFP 2001) concluded that there was a need to identify and elaborate the principles that guide WFP operations in conflict settings, including how these are operationalised in the field; further develop staff skills in areas specific to operations in conflict, such as situation/ contextual analysis, advocacy and negotiation skills, refine existing programming tools – such as registration, targeting and distribution mechanisms – and develop new tools to ensure technical capacity to reach targeted beneficiaries without compromising their security. The workshop recommended that WFP clarify its position on promoting and protecting livelihoods in conflict situations and then take steps to operationalise it.

The implications of the potential negative effects of food aid have also begun to permeate donor thinking in recent years. ECHO recently commissioned a study in southern Sudan which in part examined the role of food aid in fuelling conflict. DfID also has emerging policies on the potential of food aid to damage local economies (Shoham *pers comm*). The ODI Humanitarian Policy Group and NutritionWorks (Jaspars 2000a) reviewed the principles and practice for food distribution in conflict and made the following key recommendations:

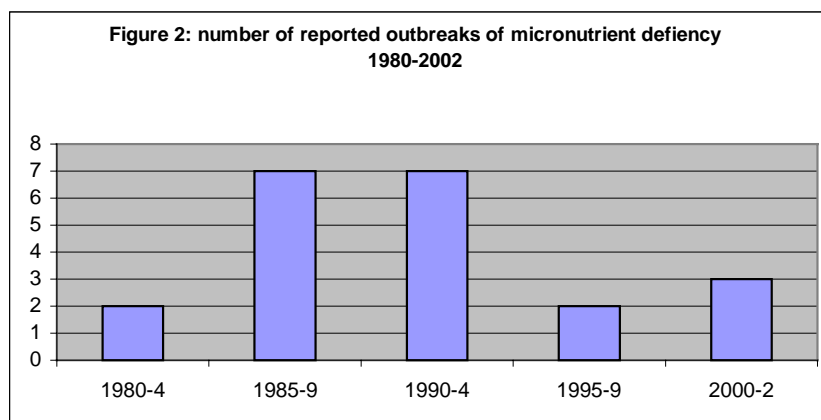
1. Programme situation analyses should include risks to lives and livelihoods, war strategies and war economy and political contracts to determine the risk of diversion of food aid;
2. Agreement with authorities and co-ordination between agencies should be based on an analysis of accountability of local authorities;
3. Appropriate distribution methods should be identified considering whether beneficiary representatives or local institutions can be relied on to distribute to the most vulnerable and if not whether registration is possible for direct distribution.
4. Risks of abuse at each stage of the distribution process should be identified and strategies developed to minimise them.

Ration Quantity

During the refugee crises of the late 1970's, (most notably those in South East Asia), there was little understanding on the part of the health-orientated aid workers, of the importance of the nutritional content of the food rations given. The focus of nutrition was very much on nutrition surveys, supplementary feeding, and various manuals were devoted specifically to the management of nutrition programmes in refugee camps. However, it was only in the late 1980s that there was a agreement among the major humanitarian organisations to increase the daily ration for refugees from 1500 to 1900 kcals per person per day (Toole 1999). In 1997, the UN technical agencies agreed that this should be increased to 2100 kcals as a planning figure and provided information to allow context specific requirements of populations to be calculated (see table 3).

Ration Quality

During the famines of the early to mid 1980s, refugee populations experienced several outbreaks of scurvy. This lead to the first realisation that the nutritional components of the diets of refugees needed to be considered in the same light as those of 'resident' populations (Toole 1999). Two meetings in 1991⁸ (Toole 1992), (Refugee Studies Programme 1991) noted that despite international nutrition guidelines, relief programmes often fail to provide the minimum recommended daily allowances (RDA) of essential micronutrients such as vitamin A, thiamine, niacin, vitamin C, iron, and folic acid (Toole 1992). Figure 2 shows that after the early 1990s the number of reported outbreaks of micronutrient deficiency (scurvy, pellagra, beri-beri, xerophthalmia and iron deficiency) declined after this period.



Source: Field Exchanges; (Toole 1992)

4.1.2. Challenges

In spite of the many advances in recent years in the emergency food aid sector there are innumerable challenges to be overcome. Once again a few examples will have to suffice here:

⁸ In November 1991 the Centre for Disease Control (CDC) in Atlanta, Georgia, USA hosted a one-day technical review of micronutrient deficiency diseases in refugee populations. In March 1991 an international symposium was held on "Responding to the Nutritional Crises Among Refugees: The Need for New Approaches).

Food Aid Resourcing

The politicisation of food aid in emergencies is at times scandalous. The mismatches in food aid allocation between emergency affected populations is a profound embarrassment to those working in the humanitarian aid sector. The geo-political factors underpinning these imbalances are plain to see. This problem extends beyond food aid. For some countries, the international response has met less than 10% of estimated needs. For Example: Eritrea in 1998 received less than US\$2 for every person affected by the emergency; the former Yugoslavia received US\$166 per person. (IASC 2000).

Bureaucratic impediments to efficient release of funds for purchase of food aid or other resources to support food security are also at times scandalous. The difficulties currently being experienced within the EC under the new regulation 296 is particularly noteworthy in this regard.

A series of external and internal reviews have identified numerous constraints that WFP face in implementing effective emergency food aid programmes (Shoham *et al* 2000). These include:

- Lack of resources for the Immediate Response Account (IRA) and International Emergency Food Reserve (IEFR)⁹
- The fiscal cycle of some donors does not coincide with those of WFP, affecting the timing of pledges and whether funds can be made available in advance or not.
- Increasingly rigorous and complex administrative and accounting procedures substantially increase the lead-time of emergency food assistance delivery.
- Length of time it takes to approve appeals for emergency assistance (one day to three months) due to the trend on the part of donors to directing resources to specific operations rather than providing them as contributions to multi-lateral contributes to the inability to obtain appropriate food commodities or commodities of adequate quality, e.g. CSB, beans
- Difficulties in obtaining accurate estimates of population numbers in need. This may result from over-registration by beneficiaries or lack of access in conflict. Inaccurate population estimates can easily lead to donor under-provisioning.

Targeting of Food Aid

Despite evidence of the difficulties of targeting in the late 1980s (Borton; Shoham 1989), the 1990s saw a renewed emphasis on targeting perhaps because of increasing application of the relief-to-development continuum model, and a decline in resources with the increasing duration of conflict-related emergencies (Ockwell 1999). Although there have been some well documented examples of appropriate targeting, in most emergency contexts, experience proves that targeting is rarely successful (Jaspars & Shoham 1999). The necessary criteria for success include stable, non-conflict situations, and relatively large wealth differentials within communities, where a large proportion of households are targeted and the ability to identify

⁹ The IRA is completely untied cash. The IEFR is a commodity-based facility with an annual replenishment target of 500,000 tonnes. There is an increasing tendency on the part of donors to insist on advance information on where resources given to the IEFR are to be used. Combined with under-pledging of the IRA this means that the WFP has to go back to governments if it needs to reschedule a commodity. At the very least, this increases storage costs, and at the worst can considerably delay emergency assistance

community representatives that can be relied on to target the most vulnerable. Efforts to establish distribution committees in southern Sudan, which identified and targeted the most vulnerable households were largely unsuccessful, as once monitoring agencies had left the distribution site, a redistribution would take place with food often being shared rather than targeted (Shoham 1999). There seems to be an increasing consensus that the greatest gains in targeting efficiency can be made by improving information systems which inform decisions about geographic targeting rather than by refining intra-community targeting systems (Shoham 1999a).

Micro-nutrient Deficiency Diseases

Figure 2 indicated that despite a huge reduction in the number of reported outbreaks of micronutrient deficiencies since the policy decisions on the early 1990s there have been a number of recently reported outbreaks. However, it is important to note that most data comes from refugee and displaced populations and is likely that outbreaks in resident populations have remained unchanged. Difficulties still faced in addressing micronutrient needs through provision of fortified foods in emergency situations are the pipeline constraints in the early stage of an emergency, the reduced shelf life of fortified commodities and the cost of fortified blended food in comparison to unfortified staple grains (Bhatia & Thorne-Lyman 2001) (see Box 5). The ability to present reliable and convincing prevalence data to advocate for these relatively high post food interventions is an important determinant. Recommendations made in an interagency meeting in early 1991 (Toole 1992) to strengthen surveillance for micronutrient deficiency diseases and develop standard clinical case definitions are still being repeated in 1998 (Seal 1998) and 2000 (Stevens *et al* 2001). Questions remain in the debates surrounding fortification, specifically where fortifications should take place and which foods should be chosen (i.e. within or near to the affected country or in the donor country). The lack of availability of data at field level on the micronutrient content and date of manufacture of many fortified food aid items increases the complexity for field staff that are managing interventions. Increasing the availability of nutrient information through current commodity tracking systems would help to alleviate some of these impediments. Although fortified foodstuffs are a corner stone of many interventions data on the effectiveness of other types of interventions such as local food production and increasing market access would be valuable but remains sketchy. It is not until these technical questions are addressed and the quality of rations is given the priority it deserves, that we will cease to observe cases of emergency related micronutrient deficiency in populations (Briend 1998).

Box 5: Case Study: Kuito, Angola: 1999 (Baquet; van Herp 2000)

With little potential for food production by the local population and numerous displaced people living in Kuito, most of this population were completely dependent on WFP rations. In July 1999, a marked increase in the number of pellagra cases resulted in an epidemic (the worst since Malawi in 1990). In January 2000 at a multi-agency meeting, it was agreed that the ration should be supplemented with CSB (rather than groundnuts as the latter lacks riboflavin and pyridoxine both of which are necessary for the conversion of typtophan into niacin). Conclusions and recommendations from this incidence determined: that it was unclear whether the lack of CSB initially occurred as a result of logistical difficulties, or due to inadequate provisioning of, or access to CSB. In any event, given the current policy of ensuring adequate micronutrient intake for populations totally dependent on food aid through the provision of fortified blended foods, established in the most recent WFP/UNCHR MoU, questions need to be asked about why this was not possible during the Kuito emergency.

Beyond Food Aid

In addition to the problems in the food aid system, there is a lack of clarity and therefore confidence within donors as to how and when food aid might be used to support livelihoods in emergencies. Donor policies on emergency food aid and food security support within emergencies are currently being newly written or revised by several key donors (DfID, USAID, CIDA, WFP, EC) and certain donor agencies are exploring both more imaginative uses of food aid in emergencies and other instruments for supporting food security in emergencies (Bhatia & Thorne-Lyman 2001). It can be assumed that donors implicitly support humanitarian agency guidelines on modalities of emergency food aid, but amongst the donors reviewed, only WFP have anything approaching guidelines on modalities of emergency food aid and alternative interventions to support food security in emergencies (WFP 2001).

4.1.3. Recommendations

1. Readjustment is required on the part of all major food aid players and institutions, in order to ensure that humanitarian needs are met adequately. This includes WFP, bilateral agencies, particularly the two largest bilateral food aid donors, the US and the EU, as well as international NGOs who deliver food aid. These agencies should engage in a paradigm shift from food response to nutritional response allowing for the reform of food aid to be consistent with a nutritional imperative. This should be paralleled with structural changes to the food aid system so food supply becomes more reliable and timely.
2. Careful analysis of the cost to communities of failing to intervene in a timely fashion to prevent market price escalation, asset depletion and decline in nutritional status should be conducted and used to advocate for clearer policy statements on the timely use of food aid, where alternatives are not appropriate, for saving livelihoods as well as lives. This should be commissioned as a multi-donor initiative.

4.2. Livelihood Support

4.2.1. Advances

Over recent years there have been notable attempts to further the experience and understanding of humanitarian agencies in the effectiveness and appropriateness of interventions aimed at supporting livelihoods without the use of food aid see (Box 6). A recently published paper by the British Red Cross (Peppiatt *et al* 2000) aims to look at the potential of cash transfers as an alternative form of relief and concludes that these findings give cause for cautious optimism and pointers to circumstances in which cash relief can work to best effect. It is beyond the scope of this paper to describe the technical debates surrounding this approach.

FAO, through its Special Relief Operations Service, buys and delivers agricultural essentials such as seeds, tools, fertilisers, fishing gear, livestock and veterinary supplies to permit immediate resumption of basic food production (FAO 1997). For example, in Rwanda 1994-5, FAO coordinated the procurement and distribution of seeds and basic agricultural equipment, as well as seed multiplication schemes. WFP may complement these activities through the distribution of a food ration to ensure that the affected populations have the capacity to engage in the food security activities. UNHCR has developed a system of quick impact projects (QIPs) that include agricultural and veterinary activities, income generation projects and education, all with the aim to encourage returnees to reintegrate and address their needs. In Somalia (1992 and 1994), agricultural QIPs were extensive (ACC/SCN 2000). Many NGOs are also involved in a wide variety of interventions supporting livelihoods (as listed in Table 3), most of which are likely to appropriate post-conflict.

Box 6: Cash distribution and agricultural support in Guatemala and Nicaragua 1998 (Peppiatt *et al* 2000)

An example of the use of cash in rehabilitation can be found in the Red Cross Hurricane Mitch Agricultural Support Programme, which aimed to help the agricultural recovery of small farmers in El Salvador, Guatemala, Honduras and Nicaragua following the damage caused by Hurricane Mitch in October 1998. Cash payments were included in Guatemala and Nicaragua as one element of a composite rehabilitation package of seed, fertiliser, grain and spray pumps. The aim of the cash component was to allow beneficiaries to buy complementary inputs not included in the package and /or food for consumption in areas where food was short.

4.2.2. Challenges

Despite the significant lack of official policies or guidelines, donors have begun to explore different modes of food security support in emergencies. Guidelines on which stages of an emergency a particular mode of intervention will be supported and at what capacity an implementing agency level is required to mount a specific mode of intervention are still required. A negative aspect of this for NGOs is that as funding opportunities and mechanisms change and diversify, bureaucratic difficulties can multiply making it harder for NGOs to access resources quickly and efficiently. At the same time unless donor policies and funding strategies are clearly formulated and coherent, agencies applying for funds may be unclear about rationales to apply to

project proposals and confused by donor responses which as often as not may be based on individual views of decision-makers rather than firm and coherent institutional policies (Shoham *pers comm*).

The remaining challenge to effective livelihood programming in conflict-related emergencies is the conflict itself. These constraints cannot be underestimated as shown in Box 7.

Box 7: Case Study: Somalia 2002 (Prendiville *pers comm*)

Progress has been made within the Somalia Aid Coordination Body, which allows for a level of coordination that would be considered unusual in neighbouring countries. Agencies continue to discuss better nutrition related strategies; agreement is made on common standards and guidelines and interagency lobbying is undertaken for the support of particular interventions; all nutrition surveys are joint efforts aiming to involve all organisations working in a particular area and recommendations are also made jointly; a nutrition surveillance system is in place, and donors have endorsed the need to develop more imaginative projects that look at alternatives for improving food security and nutrition in ways other than food aid and selective feeding.

However, despite all these efforts, in many parts of Somalia, for example in Gedo, chronically high levels of acute malnutrition, chronic insecurity, and droughts still persist resulting in a lessening of social support and weakening of coping strategies. In times and areas of heightened insecurity the Food Security Assessment Unit (FSAU) nutrition surveillance system cannot function effectively, personnel do not collect the data and reports cannot be sent. The promised funding for longer-term intersectoral projects has not always come into fruition. Travel in the region for non-Somalis is enormously restricted, due to severe insecurity, with frequent bans on all air and ground operations. Most of the local health professionals have left the region and all organisations have problems finding competent staff to run the projects - health personnel from other parts of Somalia are unwilling to move.

4.2.3. Recommendations

1. Food aid resources should be part of a more flexible system of response. In such a system emergency food aid would be procured and supplied from the most efficient and timely source for purposes of meeting the assessed quantitative and qualitative nutritional need. Similarly, resources for food should be more readily transformable into non-food inputs for health, livelihood or other inputs required to protect, maintain and recover people from nutritional assaults.
2. NGOs should seek to explore and document experience in innovative approaches to livelihood support based on a sound analysis of food access and monitoring of nutritional outcomes. These should be shared through the ENN Field Exchange forum.

4.3. Selective Feeding Programmes

4.3.1. Advances

Recent years have seen considerable advances and consolidation of existing knowledge in relation to the treatment of severely malnourished children (see Table 3). Despite improved understanding of the pathophysiology and treatment of the severely malnourished child, the median case fatality rate of children in hospitals in non-emergency settings has remained unchanged over the last 50 years and is on average 20 – 30%, with the highest levels of 50-60% (Marchand 2000). However, analysis of children in a number of therapeutic feeding centres in Africa, during emergencies, shows a case fatality rate of 9.6% (Grellety 2000).

Efforts have begun to be addressed at sustainability of the treatment of severe malnutrition in emergency-affected countries. A study comparing four centres treating cases of severe malnutrition (two TFCs, one SNU (Specialised Nutrition Unit) and one Day Care Center), in Liberia showed that the chief factor that appeared to cause the higher rates of mortality in the SNU, in comparison to the other three centres was the adequacy of the management and training skills of the senior staff. This example demonstrates the importance of longer-term efforts to build capacity at the national level in countries that are frequently affected by disasters (see Background section).

In addition to the technical advances, progress has been made in giving recognition to the importance of care and stimulation for children during rehabilitation from severe malnutrition, to promote recovery. In emergencies these components of programmes are often overlooked but their importance is becoming more widely recognised see Box 8.

Box 8: Case Study- Malnourished Rwandese orphans Kisangani, DRC, 1997 (Long et al 1998)

Examples of caring practices integrated into the programmes of Concern Worldwide included:

- employing, training and supporting local women who worked in shifts as carers. Training covered the clinical management of the severely malnourished children including a special emphasis on the importance of creating a secure and comfortable environment for the children.
- The activities were child-based rather than task-based (ensuring that they stayed with the same group of children on each shift.
- Continued support and supervision to the staff.
- Advocacy to ensure that siblings are not separated.

Difficulties encountered in undertaking this aspect of the programme included:

- The lack of locally qualified health staff with experience in caring for severely malnourished children.
- Organisations (UNHCR, NGOs and donors visiting the centre) did not fully comprehend the strict treatment regime required to stabilise these children (e.g. an initial time-frame of 5 days was given before the children had to be repatriated (this was later changed to that necessary for recovery);
- High protein biscuits were distributed at a time when a low protein diet was required.
- Separation of siblings.

4.3.2. Challenges

While significant technical advances have been made in the management of severe malnutrition, challenges remain in how and when to intervene. There is a particular need, however, to improve the integration of interventions within the Health Ministry of the countries concerned and to increase the national capacity building to manage severe malnutrition.

Much consideration is being given to the role of ‘at-home’ treatment of the severely malnourished. TFCs for treatment of inpatients with severe malnutrition in emergencies have played a major part in saving children’s lives in the past 20 years. Nevertheless, TFCs, especially in open situations (i.e. resident populations or internally displaced persons not in refugee camps) may have harmful effects on the food economy of patient’s families, encourage increased population concentrations around them and create dependence from international agencies (Collins 2001). Furthermore, coverage as a measure of the impact or quality of therapeutic feeding programmes is less consistently used and not used as a monitoring indicator for the Sphere minimum standards.

The challenge facing developments aimed at improving the scope of home based treatment remains how to ensure that mortality rates for all children remain low while designing programmes that are appropriate to the operational environmental and socio-economic context. Studies show that detailed analysis of data collected prospectively in real-life service settings can lead to major improvements in the management of severe malnutrition. The Prudhon Index¹⁰ can be used to assess expected mortality, attention should now be focused on ways to reduce mortality. This is particularly important in the light that these studies show that no relationship exists between the actual rate of weight gain and mortality rate, hence giving no support to using weight gain as the primary way of assessing the efficiency of the management of severe malnutrition (Grellety 2000).

In addition to the work on home-based care, there remain several key technical challenges to existing treatment protocols for malnutrition. Firstly, the misdiagnosis of dehydration and the inappropriate administration of saline solutions to severely malnourished children, as well as early overfeeding, seem to be responsible for many avoidable deaths. This aspect of treatment is not emphasised in any current guideline, training manual or textbook (Grellety 2000). Secondly, the effects of patients afflicted with HIV/AIDs provides a significant challenge to those treating severe malnutrition. Understanding of how such patients can be cared for in feeding programmes and within the community remain limited in emergency contexts. Finally, despite the comprehensive best practices guides (Shoham 1994), there is very limited understanding of the efficiency and efficacy of supplementary feeding programmes.

4.3.3. Recommendations

1. Broader debate is urgently needed on at home treatment of severe malnutrition in emergencies. This should include dissemination and discussion of results of programmes using RUTF and more research and scientifically supervised studies in the field (Navarro-

¹⁰ Prudhon Index: $P(\text{deaths}) = 1/(1 + \exp[-(20.63 - 9.99 \ln(\text{weight (kg)} / \text{height (m)}^{1.74}) + 1.36 \times \text{oedema})]$ (Prudhon C. Golden MH, Briend A, Mary JY 1997)

Colorado *et al* 2002). Further use of the Prudhon index should be made to evaluate the mortality risk of in-patient care and out-patient care, and to help provide a better criteria for admission to TFCs or at home treatment.

2. An interagency group should set up a joint evaluation of the role, coverage, efficacy and cost-effectiveness of supplementary feeding programmes for the treatment of moderate malnutrition. This should be undertaken under the umbrella of the Working Group for Nutrition with the ACC/SCN.

5. MONITORING AND EVALUATION

Table 4: Monitoring and Evaluation

ADVANCES MADE	OBJECTIVES
1993: Methodological guidelines for evaluations were created (eg Overseas Development Institute).	To improve standardisation of methods.
1996: Introduction of multi-donor funded evaluations of crises and subsequent responses.	To improve objectivity of the undertaking and analyses of the evaluation.
Repositories for evaluation findings have been set up eg ALNAP and the ENN Field Exchange (1996)	To improve institutional learning and ensure interagency sharing.
Monitoring and Evaluation is now included at the design stage of programme planning	To ensure that monitoring and evaluation have the adequate resources and time provisioned.
1997: Indicators defined for Monitoring and Evaluation to see that standards are being reached (eg Sphere Minimum Standards).	To standardise indicators to allow for comprehensive comparisons.

5.1. Advances

A publication by the Policy Department of Oxfam in the early 1980s (Jackson, Eade 1982) saw a growing resistance to the use of food aid¹¹. This influential study demonstrated the importance of understanding the context for interventions and monitoring the immediate and wider impact of programmes. This was followed in the early 1990s by the UNICEF ‘Triple A’ Cycle (Assessment, Analysis, Action) that was conceived within the developmental setting of Iringa in Tanzania (see Section 3.1). Like the conceptual framework, this cycle has been influential in the emergency sector too. Along side these developments, the use of the Logical Frameworks in which monitoring indicators and sources of verification must be specified has gradually been taken up by donors, and in turn agencies, to the point where the presentation of logical frameworks is now mandatory for the majority of funding applications.

These initiatives reflect the growing importance that agencies are placing on monitoring and evaluation. Donors are now increasing the availability of resources for these activities. This appears to come hand in hand with the advanced awareness of the need for accountability of our work in humanitarian contexts.

Below are some case studies (see boxes 9 – 11) of landmark evaluations that have taken place in recent years. Some reflections on the findings of these are noted in the challenges and recommendations.

¹¹ This paper was mostly concerned with project and programme food aid, not emergency food aid.

Box 9: Case Study – Operation Lifeline Sudan Review 1996 (OLS Review 1996)

Operation Lifeline Sudan (OLS) – established in 1988 - is a political and organisational arrangement that allows humanitarian assistance to reach war-affected populations. An independent review of OLS commissioned by donors and the UNDHA was completed in 1996. The aim was to look at the effectiveness of providing assistance to war-affected populations through a negotiated access programme. The findings concluded:

- Given the limited options available to war-affected populations in OLS-served areas to achieve food security, and the deliberate targeting of people's subsistence base as a war strategy, there is only limited scope for supporting coping mechanisms.
- Food security programmes such as the provision of seeds and tools, only address on the aspect of food insecurity, and therefore cannot lead to self-reliance.
- The reduction in food aid has not been matched by an increase in agriculture and livestock production support, due either to problems of access or lack of co-ordination.

Box 10: Case Study – Multi-Donor Evaluation of Rwanda Crisis and Response (1996)(JEFF 1998)

In 1996 the final report of the first multi-donor funded evaluation, undertaken for Rwandan crisis and subsequent response was produced. The findings of the food and nutrition sector of the evaluation singled out:

- Inappropriate ration planning
- Inequity of food distribution systems
- Inefficient selective feeding programmes

These difficulties were then related to a set of underlying factors including:

- Failure of agency institutional memory
- Poor co-operation and co-ordination between relief agencies
- Lack of consensus between agencies over programme design
- Shortage of suitably qualified technical staff on the ground.

Box 11: Case Study Kosovo Disaster Emergencies Committee (DEC) Evaluation 2000 (ODI, Valid International 2000)

Among the findings of the DEC Kosovo Evaluation were the following:

- Within the overall humanitarian response to the Kosovo crisis, little emphasis was put on assessments. The reasons for this included the pressure to spend money within a short time frame, the easy availability of funding and the lack of pressure from donors to undertake assessments.
- Malnutrition was not a major problem and there was generally an over-supply of food aid in Albania and Macedonia. Many donor countries provided funding direct to NGOs to buy additional foods; and donations – ranging from Mars bars, Italian cakes, pain au chocolate, Turkish delight, as well as healthier alternatives such as milk, cheese, fresh fruit and vegetables (Jaspars S. 2000).
- Most agencies focused on monitoring output indicators relating to material distribution. Few evaluations undertaken by DEC member agencies or their related networks looked at the

impact of their programmes, instead focusing on organisational and management issues. Almost no agencies made any attempt to calculate cost-effectiveness indicators.

- Kosovo was the first emergency in which Sphere minimum standards in water supply and sanitation, nutrition, food aid, shelter and health could be 'field tested'. Some DEC agency staff questioned the relevance of Sphere Standards in a European setting.

The Sphere project has also created a valuable impetus to monitor the context in which interventions are made, conduct evaluation and institutionalise learning. There have been several critiques of the application of Sphere standards in different humanitarian contexts. Box 12 draws on the only peer-reviewed critique published to date.

Box 12: Case Study from Southern Sudan (Griekspoor & Collins 2001)

Sphere recognises that factors outside the control of humanitarian agencies affect their ability to meet minimum standards of service provision. Four prerequisites need to be met: everyone involved in humanitarian assistance should share a common goal; there should be access to the afflicted population; sufficient funds should be made available; and everyone should be committed to meet minimum standards. In Sudan during 1998, none of these underlying assumptions were met. The humanitarian crisis and the response were highly orchestrated by the Sudanese governments and the Sudan People's Liberation Army. Access was severely restricted. The flight restrictions flouted international humanitarian law that obliges states to agree to the provision of humanitarian assistance. Large amounts of relief grain were diverted to the military so that the general ration remained well below requirements. Adequate donor funding was available only after June when pictures of starving children appeared on Western television.

In that context, the evaluators examined the application of the Sphere standards and indicators to assess the impact of a supplementary and therapeutic feeding programme run by an international NGO in three localities. Results were mixed – between indicators and between locations. In general, most of the process indicators for both the supplementary and therapeutic components were met. In contrast, the majority of the outcome indicators for the treatment of severely malnourished (e.g. mortality, recovery, default and weight gain rates) were not met. This was largely because compromises had to be made in the programme to address the serious constraints in the operational context.

This experience highlights the importance of using the Sphere handbook in its entirety (i.e. recognising its scope and limitations, and referring to the humanitarian charter as well as the technical standards) when monitoring and reporting on programmes. The handbook needs to be used as it was intended: as a reference tool for evaluations, requiring proper analysis and documentation of the contextual constraints that impinge on programme success.

5.2. Challenges

There is a significant dearth of thematic evaluations. For example there has been no comprehensive 'overview' impact evaluation of emergency supplementary feeding programmes along the lines of the Beaton Ghassemi study on SFPs in non-emergency situations in the 1980s (Beaton & Ghassemi 1982). It may be that a large proportion of emergency SFPs fail to reach

Sphere targets given emergency contexts e.g. poor general rations. Until such a study has been implemented there can be no certainty that emergency SFP implementation is a cost-effective use of resources.

Impact indicators (usually primarily quantitative) are prioritised in monitoring and evaluations, often to the expense of process indicators (Toole 1999). Too great an emphasis is placed on anthropometric and mortality indicators as a means of monitoring and evaluation. There is little agreement on appropriate indicators for early warning, recognising that deterioration in nutritional status is usually a late indicator of a crisis.

In many contexts where agencies have previously worked for many years under relatively stable conditions, on arrival of an emergency, there is frequently a substantial lack of base-line data available. The gathering of baseline information in emergency prone communities is an essential component of emergency preparedness.

One of the regular findings of independent evaluations, e.g. CDC, bilateral government evaluations, and material submitted to Field Exchange, is that there are still enormous difficulties with up take/implementation of best practice by implementing agencies. There may be many reasons for this; absence of guidelines at project level, poor training of field staff and lack of technical support by headquarters staff. There may be many factors that in turn underlie these constraints; development agencies 'turning their hand' to emergency work but lacking the institutional expertise and support capacity; agencies trying to maintain capacity in all sectors of emergency food and nutrition, e.g. from therapeutic feeding to livestock interventions, but lacking the capacity to maintain expertise in the diverse array of activities involved (see Background section).

5.3. Recommendations

1. Monitoring and evaluation needs to consider issues of accountability and a willingness to document mistakes. Agencies should work together to produce and reach consensus on interim indicators to monitor before anthropometric indicators are likely to deteriorate. This should be emphasised in both the ENN and RNIS forums. Monitoring and evaluation systems must be expanded beyond inputs and outputs (UNACC/SCN 2000) - e.g. must include usual threats to livelihoods, an understanding of the changes in the external environment, social, cultural, environmental and fiscal impact of programmes.
2. Assessments, monitoring reports and evaluations must be more systematically documented within countries and be easily accessible to agencies working in emergencies. This requires the breaking down of barriers between 'developmental' and 'emergency' organisations.
3. More thematic evaluations need to be undertaken (for example in SFCs). This should be put on the agenda for the SCN interagency – donor Working Group (recommended in section 2.3).
4. The Sphere handbook should be used as it was intended: as a reference tool for evaluations, requiring proper analysis of the contextual constraints that impinge on programme success. Its scope and limitations must be recognised by donors, decision-makers, authorities and beneficiaries alike, and reference must always be made to the humanitarian charter as well as

the technical standards when monitoring and reporting on programmes. Furthermore it is important to broaden interest, commitment and responsibility in Sphere and humanitarian work in general, to regional and country-based institutions. By the end of 2002, agencies must give their recommendations on any necessary changes that they wish to see in the Sphere Minimum Standards to the Sphere project. Within this, the following recommendations might be considered:

- To clarify the definition of the term ‘minimum’.
- To promote the use of operational guidelines in order to complement the Sphere Standards.
- To consider ways to create the necessary environment to promote accountability and transparency.

6. CONCLUSIONS AND RECOMMENDATIONS

This paper has attempted to highlight the work of NGOs, donors and the UN as complementary parts of the humanitarian system over the last 20 years. This paper has shown that the emergencies sector recognises the importance not only of technical solutions, but the social, economic and political determinants of both the problem in the first place, and also the role of social processes in implementing effective interventions. Furthermore, the paper emphasises that successful nutrition interventions hinge on good practice in operational terms; transparency, accountability and a willingness to listen and take on board peoples views using participatory approaches where possible.

Many of the advances made and challenges remaining in the task of preventing and treating malnutrition in conflict and crises are addressed. All three groups of agencies have worked together to achieve significant information sharing and collaboration through interagency meetings, the initiation of the Emergency Nutrition Network and the unprecedented collaboration in the writing of the Sphere project nutrition chapter. In all areas of the project cycle, emphasis must now be placed on building capacity at all levels in best practice approaches.

In assessments, the major advances in methodologies have sharpened our analyses and improved programme design. However, information has proven insufficient to always initiate response and the effective translation of assessment recommendations into appropriate action remains constrained.

The proportion of food aid allocated to emergencies has increased over the last 20 years, though it remains low and the availability of this aid still fluctuates according to global food surpluses. WFP and donors have made substantial efforts in improving systems for the provision of food aid. In recent years guidelines have been developed to ensure these advances permeate to the field level. However, still the politicisation and dysfunctional structures in the emergency food aid remains, at times, scandalous.

In contrast to food aid programming, therapeutic feeding programmes have become increasingly effective in reducing in-patient mortality. This has been supported by rapid scientific advances and the development of nutritional products. There is increasing scope for innovative programming in post conflict settings. This allows nutritional programmes to realise their broader cross-sectoral goals. The increasing understanding of the prioritising of accountability in programming has led to monitoring and evaluation being invested in, methods strengthened and lesson learning initiated.

This paper has attempted to provide recommendations which will contribute to the development of a plan of action for NGOs, donors and the UN Agencies through the Sub-Committee on Nutrition. Within each section specific technical recommendations are given, however, some generic recommendations can be made:

1. An NGO-sponsored website should be established to enhance accurate media reporting on food and nutrition in humanitarian situations, blowing the whistle on major injustices

2. Extension of the international cooperation and collaboration between international agencies to more regionalised initiatives involving local institutions and local nutritionists should be prioritised. This could be addressed through the existing Capacity Building Thematic group in the SCN Nutrition in Emergencies Working Group.
3. The links between the donor and the practitioner need to be strengthened. Past experiences of failures and successes need to be shared. This requires the essential development of much stronger relationships between public nutritionists, donors and key decision-makers. The ACC/SCN could consider providing a forum for a working group to facilitate this interaction.
4. Policies must be translated into practice: All agencies need to ensure a routine incorporation of training modules into their human resource development systems and also to set up effective monitoring and evaluation of the impact of this.

Other recommendations that must be prioritised by all agencies include:

- Readjustment on the part of all major food aid players and institutions, in order to ensure that humanitarian needs are met adequately. This includes WFP, bilateral agencies, particularly the two largest bilateral food aid donors, the US and the EU, as well as international NGOs who deliver food aid. These agencies should engage in a paradigm shift from food response to nutritional response allowing for the reform of food aid to be consistent with a nutritional imperative.
- Food aid resources should be part of a more flexible system of response. In such a system emergency food aid would be procured and supplied from the most efficient and timely source for purposes of meeting the assessed quantitative and qualitative nutritional need. Similarly, resources for food should be more readily transformable into non-food inputs for health, livelihood or other inputs required to protect, maintain and recover people from nutritional assaults.
- Monitoring and evaluation needs to consider issues of accountability and a willingness to document mistakes. The Sphere project should be seen as a vehicle through which to achieve this. Agencies should work together to produce and reach consensus on interim indicators to monitor before anthropometric indicators are likely to deteriorate. This should be emphasised in both the ENN and RNIS forums. Monitoring and evaluation systems must be expanded beyond inputs and outputs (UNACCSCN 2000) - e.g. must include usual threats to livelihoods, an understanding of the changes in the external environment, social, cultural, environmental and fiscal impact of programmes.

In 2001 there were 79 emergencies classified by the US Government (OFDA 2002). Affected populations in very recent years are still showing extremely alarming rates of malnutrition – up to 70% global acute malnutrition in 1998 in southern Sudan (Maxwell 2000) and micronutrient deficiency outbreaks still occur. Advances, there have been, but the humanitarian situation in the twenty first century leaves no room for complacency.

ANNEX 1

Workshops and Conferences Organized on the Subject of Nutrition in Emergencies

Year	Workshop of conference	Significant outcomes
1988	Nutrition in Times of Disaster. Geneva, Switzerland. Organized by the World Health Organization and UNHCR.	This meeting reached a consensus about the need to set a minimum level of energy requirement for 1900 kcal.
1991	Responding to the Nutrition Crisis among Refugees: the Need for New Approaches, Oxford, UK. Organized by the Refugee Studies Programme, Oxford.	This was the first time an international meeting presented detailed evidence based case-studies which clearly showed the poor nutrition status of refugees and the inadequacy of the food they receive, and explored reasons for this).
1993	Workshop on the Improvement of the Nutrition of Refugees and Displaced People in Africa. Machakos, Kenya.	Range of strategies proposed to combat micronutrient deficiency diseases.
1995	Tools and Strategies in the Management of Nutritional Emergencies. Addis Ababa, Ethiopia. Organized by UNHCR.	Resulted in collaborative links and initiatives, including: 1. The Emergency Nutrition Network – The Field Exchange 2. The formation of an informal Inter-Agency Group on Nutrition in Emergencies.
1997	Inter-Agency Workshop – Emergency Selective Feeding Programmes. Dublin, Ireland. Organized by Concern Ireland.	This brought together the nutrition community to discuss some long outstanding issues related to supplementary feeding and to learn about the new developments – major advances in treating severely malnourished children.
1998	Inter-Agency Workshop – Food Security Assessments in Emergencies: Amsterdam, The Netherlands. Organized by MSF, Holland.	This highlighted the role of qualitative methodologies in food security and the broad similarities amongst agencies in their approaches.
1999	Inter-Agency Workshop – International Public Nutrition in Emergencies: The Potential for Improving Practice. Organised by Feinstein International Famine Center, Tufts University, USA.	Advocacy of a problem-solving approach to basic nutrition problems and the promotion of a Public Nutrition approach to improve practice.
2001	Inter-Agency Workshop – Minimum Standards for Food Security in Disaster Response. Organised by Oxfam, Oxford, UK.	This determined the need to develop Sphere Project minimum standards in food security and to revise the food aid chapter.

Adapted from: Young H. (1999)

ANNEX 2

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